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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,061	04/05/2001	Chuan-Yu Hsu	112.P14061	3443
43831	7590	11/27/2007	EXAMINER	
BERKELEY LAW & TECHNOLOGY GROUP, LLP			SAFAIPOUR, HOUSHANG	
17933 NW Evergreen Parkway, Suite 250			ART UNIT	PAPER NUMBER
BEAVERTON, OR 97006			2625	
MAIL DATE		DELIVERY MODE		
11/27/2007		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/827,061	HSU ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Houshang Safaipour	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 12 October 2006.  
 2a) This action is **FINAL**.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 30-57 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 30-57 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
     Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
     Paper No(s)/Mail Date. \_\_\_\_\_  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments with respect to claims 30--57 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 30-37, 40-46 and 48-57 rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant Admitted Prior Art (AAPA) and further in view of Murakami et al. (US 4,460,939).

Regarding claim 30, which is representative of claim 40, AAPA discloses optical chassis comprises a shell body (141) having an accommodation space defining a plurality of inside walls; a plurality of reflection elements (mirrors 143) formed on at least a portion of the plurality of inside walls (fig. 2). Murakami discloses a hollow shell (5) which its internal surfaces 2a and 3a are coated [directly] with a mirror-like reflecting layer (fig. 3, col. 2 lines 58-64). Murakami further discloses a hollow shell (5) with two mirrors (reflecting planes) (10 & 11) formed on the shell 5 for reflection of the light rays (fig. 5 col. 3 lines 32-49). Therefore it would have been obvious to a person of ordinary skill in the art to use the hollow shell of Murakami's invention with the mirrors formed thereon as the replacement for shell 141 as disclosed in AAPA in order

to have less complicated and less expensive structure (Mukarami in col. 1, lines 22-23 discloses that his structure would overcome the complexity of the known structures).

Regarding claim 31, Applicant's admitted prior art teaches a light source (142) coupled to the body to transmit light to one or more of the reflection planes (Fig 1 and 2).

For claim 32, which is representative of claim 49, Applicant's admitted prior art teaches wherein the optical chassis comprised at least a portion of an optical scanner (See Paragraph 005).

Considering claim 33, which is representative of claims 42 and 51, Applicant's admitted prior art teaches wherein the shell body and plurality of reflection planes are formed as a single piece (See Figs 1 and 2).

For claim 34, which is representative of claims 43 and 52, Applicant's admitted prior art teaches wherein the shell body further comprised a lid body and a major body, wherein the lid body and the major body are formed as separated pieces and subsequently assembled (See Fig 1).

For claim 35, which is representative of claims 44 and 53, Applicant's admitted prior art teaches wherein at least two of the plurality of inside walls are substantially opposed, and wherein a reflection plane is formed on each of the at least two substantially opposed inside walls (See Fig 2).

Considering claim 36, which is representative of claims 46 and 54, Murakami teaches wherein the one or more plating films comprise one or more of: silver, chromium, aluminum, and/or platinum, and/or alloys thereof (col. 2, lines 58-64).

Considering claim 37, which is representative of claim 55, Applicant's admitted prior art teaches wherein at least a portion of the reflection planes have substantially corresponding angles (Fig 2).

Considering claims 41 and 45, according to Applicant's Fig 2, though it is not explicitly shown wherein forming said shell body further comprises forming from one or more of: injection molding, die-casting, squeeze forming, milling, CNC machining, and/or combinations thereof, the examiner took Official Notice of the fact that plastic injection molding is a well-known process in forming frames including image sensing modules or chassis. Therefor, it would have been obvious to one of ordinary skills in the art at the time of the invention to utilized plastic in the process of injection molding to produce a light-weighted and yet strong chassis.

For claim 50, Applicant's admitted prior art teaches a shell body (141) having an accommodation space defining at least two inside walls: at least one reflection plane (mirrors 143) formed on the at least two inside walls; a light source (142) coupled to the body to illuminate at least one of the reflection planes; a lens set (144) to focus light reflected by the one or more reflection planes.

Murakami discloses a hollow shell (5) which its internal surfaces 2a and 3a are coated [directly] with a mirror like reflecting layer (fig. 3, col. 2 lines 58-64). Murakami further discloses a hollow shell (5) with two mirrors (reflecting planes) (10 & 11) formed on the shell 5 for reflection of the light rays (fig. 5 col. 3 lines 32-49). Therefore it would have been obvious to a person of ordinary skill in the art to use the hollow shell of Murakami's invention with the mirrors formed thereon as the replacement for shell 141 as disclosed in AAPA in order to have

less complicated and less expensive structure (Mukarami in col. 1, lines 22-23 discloses that his structure would overcome the complexity of the known structures).

3. Claims 38, 39, 47, 48, 56 and 57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant Admitted Prior Art (AAPA), in view of Murakami et al. (US 4,460,939) and further in view of Vent (US 5,489,457).

Regarding claim 38, which is representative of claim 56, Vent teaches wherein the one or more plating films are further coated with one or more protection materials (2:6-14; 4:1-20; 5:57-6:2).

For claim 39, which is representative of claims 48 and 57, Vent discloses wherein the protection materials comprise one or more of: PE plastic films and/or macromolecular material (4:1-9).

For claim 47, Vent teaches forming one or more protection materials on at least a portion of the plating films (2:61 67).

### **Second Rejection**

#### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 30 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Murakami (US 4,460,939).

The recitation "An optical chassis" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Regarding claim 30 which is representative of claim 40 Murakami discloses:

a hollow shell (5) which its internal surfaces 2a and 3a are coated [directly] with a mirror like reflecting layer (fig. 3, col. 2 lines 58-64). Murakami further discloses a hollow shell (5) with two mirrors (reflecting planes) (10 & 11) formed on the shell 5 for reflection of the light rays (fig. 5 col. 3 lines 32-49).

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Houshang Safaipour whose telephone number is (571)272-7412. The examiner can normally be reached on Mon.-Fri. from 6:00am to 2:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on (571)272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Houshang safaipour  
Patent Examiner  
November 21, 2007

A handwritten signature in black ink, appearing to read "Houshang safaipour", is positioned above the typed name and title.